

# IKHANA Unmanned Aerial Vehicle

The IKHANA aircraft is an airborne platform used to conduct long-duration Earth observation and atmospheric sampling science missions world-wide, develop and demonstrate technologies that improve the capability of unmanned aircraft to conduct science data collection, develop technologies that improve the capability, reliability, and safety of manned and unmanned aircraft.

IKHANA: (a Choctaw word for “intelligent, conscious or aware”).

IKHANA is a low-wing monoplane with narrow fuselage and high aspect-ratio wing, large V-shaped tail with ventral fin, rear-mounted turboprop engine. Enlarged fuselage nose to accommodate various payloads. Retractable tricycle landing gear. Redundant navigation and flight controls.

National Aeronautics and Space Administration

## Aircraft I Sheet



# IKHANA



[www.nasa.gov](http://www.nasa.gov)

## Aircraft Specifications

**Wingspan:** 66 feet

**Length:** 36 feet.

**Gross weight:** 10,500 lbs

**Payload:** Over 3000 lbs of radar, sensors, communications and imaging equipment

**Altitude:** greater than 40,000 ft

**Propulsion:** Honeywell TPE-331-10YGD turboprop with digital electronic engine control, driving a three-blade constant-speed propeller

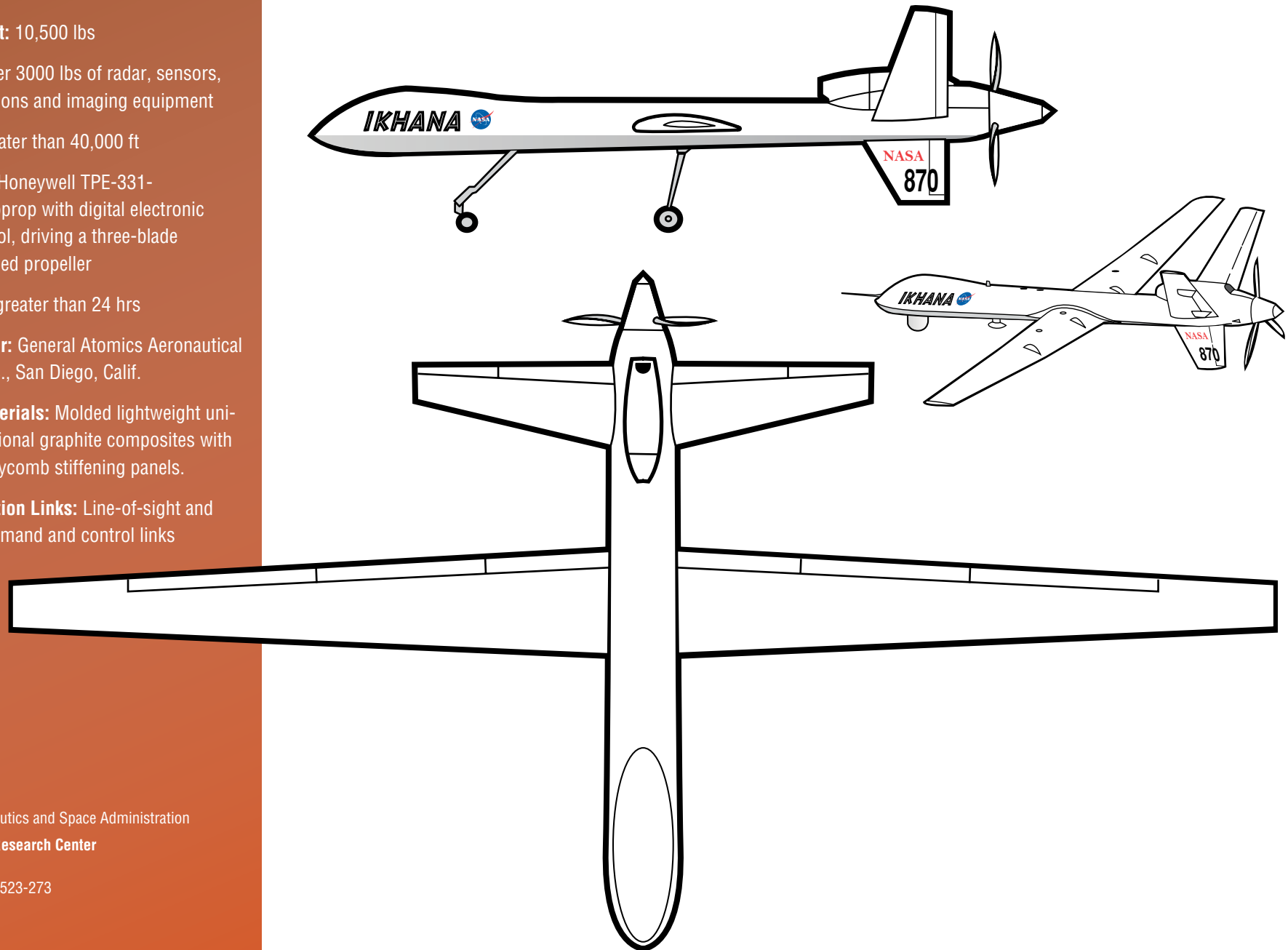
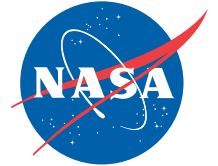
**Endurance:** greater than 24 hrs

**Manufacturer:** General Atomics Aeronautical Systems, Inc., San Diego, Calif.

**Primary materials:** Molded lightweight uni- and bi-directional graphite composites with Nomex honeycomb stiffening panels.

**Communication Links:** Line-of-sight and Satellite command and control links

# IKHANA Unmanned Aerial Vehicle



National Aeronautics and Space Administration

**Dryden Flight Research Center**

P.O. Box 273

Edwards, CA 93523-273